

Asian researchers study pill safety

Marjorie Koblinsky

AN estimated 25 million women in the developing countries of Asia use oral contraceptives. Yet research studies continue to suggest a link between regular use of "the pill" and various diseases of the circulatory system, particularly thrombosis.

Most of the current research, however, has been carried out in the West, especially in the United States and Britain. In late 1976 a meeting of Asian researchers concerned with areas of safety of contraceptives that needed further investigation, was sponsored by the IDRC. Oral contraceptives emerged as a main priority, and since that time a number of research projects have begun to investigate the health risks to Asian women taking the pill.

In Hong Kong, where an increase in female patients with heart ailments was noted between 1969 and 1975. A systematic and in-depth review is being carried out of the records of women admitted for heart ailments to determine the extent of the increase, and whether there may be a link between the increase in frequency of the disease and the use of oral contraceptives.

Another study in Hong Kong will investigate the relationship between oral contraceptive use and antithrombin in III — a natural anticoagulant that appears to be diminished in people suffering from thromboembolism. Over a period of one year, 100 oral contraceptive users who are scheduled for pelvic surgery will be compared with 100 non-users, matched for age diagnosis and type of surgery. At the same time a comparison of Chinese and Caucasian users and non-users will be made to determine if there are any differences in the effects of the pill on the two ethnic groups.

Changes in glucose tolerance and insulin metabolism have also been noted in oral contraceptive users. An IDRC-funded Inter-University Collaborative Fertility Project has now shown apparent differences in the changes among Asian and Caucasian women.

Researchers from the Universities of Singapore, Malaya and North Sumatra showed that, whereas both groups of women had decreased glucose tolerance and slightly elevated insulin levels, only Western women showed a marked increase in cholesterol levels — an increase that may not be reversible. There were however, inconsistencies in the data, and further analyses are now being carried out.

Another problem associated with use of the pill is hypertension. Studies in the US and Britain have shown different reactions among black and white women, but other groups have not been so well studied. At Yonsei University in Seoul, the IDRC is supporting studies on the effects of oral contraceptives on metabolic changes related to hypertension in Korean women.

The Seoul researchers will also investigate the possibility that contraceptive steroids can be passed to the infant through the mother's milk, and the effect this might have on the breast-fed baby. This is an area of oral contraceptive research that has not previously been widely investigated.

A recent Ford Foundation study warned that a great deal more attention (and funding) must be given to "studies of intermediate and long-term safety of methods of fertility regulation now widely used, and new methods yet to be developed." Asia's researchers are well aware of that need, and their efforts to seek the safest possible methods continue to receive IDRC support. □

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Every young and developing country expects a lot from good internal communications. Priorities are numerous but road construction is always near the top of the list. It is hoped that along with the roads, better services and increased incomes for the rural people will follow. But how does this happen in reality?

A research team in Southeast Asia has recently come up with a detailed set of facts to describe this reality. Under the supervision of Dr Niew Shong Tong from the Geography Department of Nanyang University, in Singapore, and Dr Lim Heng Kow from the same department but formerly with the University of Malaya, in Kuala Lumpur, the researchers studied the extremely heterogeneous State of Sarawak, in Eastern Malaysia.

Ethnically, geographically and socio-economically, Sarawak is made up of very different entities. The urban centres are predominantly populated by Chinese who migrated to Sarawak generations ago, while the rural areas are populated by some Chinese farmers and 24 indigenous groups.

The land itself is divided into three parallel strips with a central hilly region bordered by swamps on the China Sea coast and on the interior by mountains. The advanced sector of the economy is almost the exclusive lot of the Chinese while the Malays, on the coast, and the Ibans, Bidayuh and Kayans of the interior either fish or practice shifting agriculture.

For a long time, the numerous rivers that slice through the three strips of terrain were the only means of communication and transportation. Virtually all settlements were situated beside the sea or along a river. Before the last World War there was only a single mile of paved road in all Sarawak. But since the independence of Malaysia in 1963 the government has launched one ambitious plan after another to build a modern network of roads in Sarawak. In 1972, there were 1,250 miles of road, of which 250 were paved. Construction continues at an accelerated pace and when the Sibu-Bintulu road is terminated in 1978, Sarawak will have for the first time, a road through its whole length.

Since 1963, Malaysia has invested more than \$400 million Malaysian (US\$160 million) on roads. The cost is very high because of the many rivers that must be crossed, the lack of good quality sand and rock, and the tropical rains (100 to 200 inches per year) that erode the embankments.

But Malaysia is pushing forward in an effort to improve national unity by facilitating communications between the Chinese cities and the indigenous populations of the rural areas. The government means also to provide access to new lands for the Chinese population and to settle along the roads the people of the interior who use large areas of valuable land for shifting agriculture. It is hoped that the indigenous populations

Sarawak's new roads bring change to the rural people

Jean-Marc Fleury

will settle in Land Development Schemes where they will cultivate cash crops (rubber, pepper, palm oil) using modern agricultural practices. With the socio-economic development of Sarawak, the government wants also to reduce the gap between the more advanced peninsular Malaysia and the still largely backward Sarawak.

The rapid extension of the road network into advanced as well as very traditional areas of Sarawak provided an excellent opportunity to study the socio-economic impact of roads in a developing region. The study team of 25 researchers from the University of Malaysia and three from Nanyang University conducted more than a thousand interviews in urban centres, villages, and in the longhouses of the Ibans, Bidayhs and Kayans. The analysis of the data is not yet complete, but preliminary reports already provide a good picture of the role a major road has played in Sarawak.

Changes were quite apparent on both sides of the road. Where the road has moved into a region populated by Ibans living in longhouses, some families have relinquished the communal life and now live near the road in individual dwellings. In other areas occupied by Chinese settlers, pepper gardens have sprung up along the newly built roads. Roofing material, bricks, asbestos and cement are now much more widely seen while the use of electricity and piped water has increased by as much as 20 percent. In the government Land Development Schemes, most of the families enjoy electricity and piped water. This is completely new for the areas set up before the advent of the roads, but these services are built right into the developments now being opened up along the new roads.

One of the most dramatic impacts of the new road was to cut travel time by 70 percent. Between 20 and 30 percent of the people no longer have to walk to the market. This percentage should increase very rapidly as more and more feeder roads connect the settlements to the trunk road. In most regions buses now carry the small farmer with his load of vegetables or paddy rice. In the eastern part of Sarawak roads and development came so rapidly that bus services were not implemented and cars and trucks are preferred. But two-thirds of the families do not own a bicycle, a motorcycle or a car.

The researchers found that farm products like rice, fruits, vegetables and

chicken are sold more often now, and usually go directly to the town shops, bypassing the middlemen. Fruits, vegetables, chickens and pigs are produced on a much wider scale in the farms near the large centres, raising the income of the small farmers.

Other agricultural products that can be easily carried in bulk, like pepper and rubber, are now being taken from the farms by trucks sent by wholesalers from the main cities. Before the roads, transportation originated from the rural areas toward the centres, now the pattern is reversed. Government marketing agencies can now also get to the rural areas to offer fixed prices to the farmers for their pepper and rubber.

All these new communication patterns are contributing to pressure the farmers out of the subsistence economy and encouraging them to participate in the wider cash economy.

The young generation is also feeling the pull of the wider world. Immigration is accelerating with the connection of the settlements to the trunk road. Two thirds of these migrants are in their teens and most of them are young girls. The cities, which are developing more rapidly, offer them better jobs, mainly in

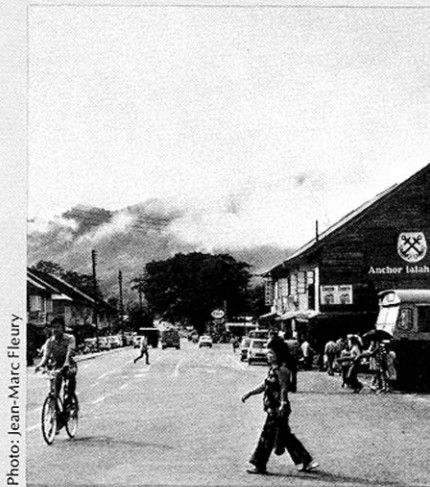
the government, but many end up in the burgeoning bar business.

In the long term, their young brothers and sisters will probably be more qualified and able to get more challenging jobs since it is now much easier for them to go to school. In one region where most of the children had to walk to school, now two-thirds board a bus. Much still has to be done however, since in all the settlements studied an average of 60 percent continue to walk to school.

The report stresses as its main point that roads alone will not bring development to a backward region and suggests multifaceted policies to make sure that the roads will bring the desired improvements.

First of all, provision should be made to facilitate the ownership of simple transportation means like a bicycle, the prime vehicle of development, or the creation of bus companies. There are now only 32 bicycles for each 100 families in Sarawak. There is also a need to step up rural extension work in order to educate farmers in the use of fertilizers and new agricultural methods. This, Drs Niew and Lim suggest, should not be done anymore with the "spoon feeding" approach but by giving the traditional communities a chance to take their development in their own hands. The community spirit should be preserved and used to promote progress, they say. Finally, the report recommends that rural industries be set up to provide challenging job opportunities for the young — rice mills, brick works, pepper, oil palm, timber, cane and rubber factories.

Malaysia has vowed to integrate the different entities of the State of Sarawak in order to promote national unity and development for all. The government is constructing roads as a major component of this thrust; the amount earmarked for rural roads in the Third Malaysia Plan has been quadrupled to \$477 million recently. The State Planning Unit helped the University team in its field work and the project was supported by an IDRC grant. When the final report is submitted early in 1978 it should assist the Government of Malaysia in the continued reassessment of its development efforts. □



The new roads bring many changes to the rural areas, and to the small towns along the way.

Jean-Marc Fleury, science writer with the Centre's Publications Division, travelled to Sarawak on a recent visit to Asia, and discussed the project with many of the researchers involved.